

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Work Order ID 152733

Monday, November 07, 2016 3:00:50 PM

152733

Page 2

Item ID: D3197-041**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Bar**Start Date:** 10/27/2016 **Start Qty:** 4.00 ***4*****Cust Item ID:****Required Date:** 11/7/2016 **Req'd Qty:** 4.00 ***4*****Customer:****Reference:****Approvals:** **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____**Run Start *NR1*****QC:** _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____**Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Lathe Conv Conventional Lathe	CONVENTIONAL LATHE Memo Chamfer as per Dwg D3197	0.00 0.00				<u>S</u>	<u>Ø</u>		DAS 49 9-89 11/11/25
140 *140* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.01				<u>S</u>	<u>Ø</u>		DAS 33 9-89 11/11/26
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.09				<u>(x5)</u>	<u>Ø</u>		2016/11/30 BEB

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OTHER : _____																																																															

Work Order ID 152733

152733

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Item ID: D3197-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bar
Start Date: 10/27/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 11/7/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 <i>M/34858</i> Memo START TIME: <i>8:10</i> FINISH TIME: <i>8:40</i>	0.00 0.02				<i>5</i>	<i>φ</i>	<i>16-12-01</i>	<i>DAS 34 9-89</i>
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.01				<i>5.</i>	<i>unf</i>	<i>16-12-01</i>	<i>DAS 11 9-89</i>
180 *180* Small Fab Small Fab	Small Fab Memo Assemble D3197-041 as per Dwg D3197	0.00 0.20				<i>5</i>	<i>FF</i>	<i>DEC 1 6 2016</i>	

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																				
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Work Order ID 152733***152733***

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Item ID: D3197-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bar
Start Date: 10/27/2016 Start Qty: 4.00 ***4*** Cust Item ID:
Required Date: 11/7/2016 Req'd Qty: 4.00 ***4*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	QC5- Inspect part completeness to step on W/O	0.00							
190									
QC	Memo	0.01							DAS 9 9-89
Quality Control									
200	Identify as per dwg & Stock Location: <u>S128</u>	0.00							
200									
Packaging	Memo	0.01							S DAS 6 9-89 DEC 19 2016
Packaging									
210	QC21- Final Inspection - Work Order Release	0.00							
210									
QC	Memo	0.07							DAS 21 9-89 DEC 20 2016
Quality Control									

DAS
21
9-89

DEC 19 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER :			
Misidentified ☐		Past Due ☐					

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152733

D3197-041

Required Date: 11/7/2016

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS27039-1-24		Purchased	No			100	Each	90.0000	2	8			
MS27039-1-24									**		FF	DEC 15 2016	
Screw													

D2690-5
D2690-5
 Lanyard Assembly

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST279	90	
m134537	90	

D3242-1

D3242-1

Tag

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
ST009	4	
151409	4	

D3489-3-200

D3489-3-200

Pip Pin

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
GA 152857	9	
135074	9	

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
GA 152735	4	
147248	4	

B154114 (2)

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Picklist Print

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Work Order ID: 152733

152733

Parent Item: D3197-041

D3197-041

Parent Item Name: Bar

Start Date: 10/27/2016

Required Date: 11/7/2016

Start Qty: 4.00

Required Qty: 4.00

M7075T73R1.000

Purchased

No

180

f

18.9800

2.42

12.1

M7075T73R1 000

7075-T73 Rd Bar 1.00

**

DAS
49
9-89

16/11/20

Location

Loc Qty

Loc Code

MAT

18.98

m134522

18.98

MS21042L3

Purchased

No

180

Each

2,252.000

2

8

MS21042L 3

Nut

**

FF

DEC 15 2016

Location

Loc Qty

Loc Code

FP001

7

M130922

7

GA

216

m134360

108

m135135

108

10

OVER007

1200

m135945

600

M136044

600

ST303

829

m135530

226

m135600

3

m135767

600

NAS1149D0363J

Purchased

No

180

Each

1,164.000

6

24

NAS1149D0363.J

Washer

**

FF

DEC 15 2016

Location

Loc Qty

Loc Code

GA

336

m134055

336

30

ST263

828

m135864

828

Monday, November 07, 2016 3:00:53 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

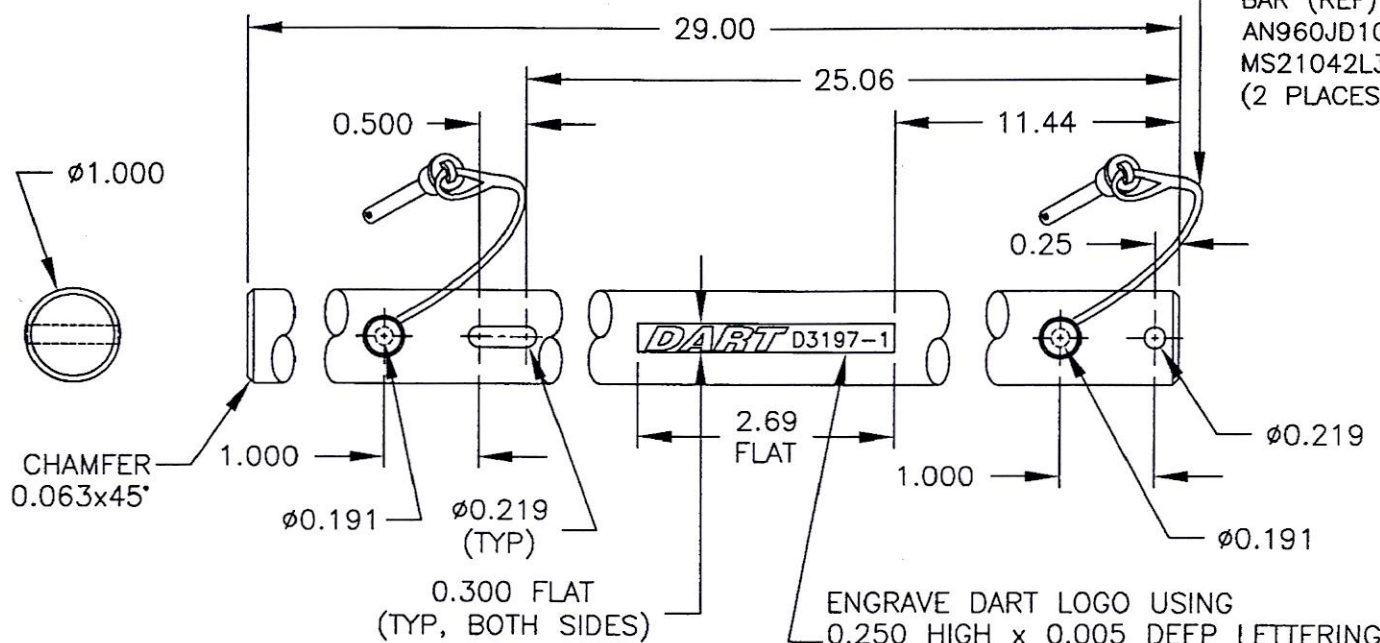
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

RELEASED

DART

- D3489-3-200 PIP PIN (1)
- D3242-1 TAG (1)
- MS27039-1-24 BOLT (1)
- AN960JD10 WASHER (1)
- D2690-5 LANYARD (1)
- AN960JD10 WASHER (1)
- BAR (REF)
- AN960JD10 WASHER (1)
- MS21042L3 NUT (1)
- (2 PLACES)



D3197-041 BAR ASSEMBLY

ENGRAVE DART LOGO USING
0.250 HIGH x 0.005 DEEP LETTERING
AND P/N USING 0.150 HIGH x 0.005
DEEP LETTERING ON BOTH SIDES

D3197-1 BAR

- 1) MATERIAL: 7075-T73 ROUND BAR (QQ-A-200/11 or QQ-A-225/9) ϕ 1.000 O.D.
(REF DART SPEC. M7075T73R1.000)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) FOR TOOLING, IT IS ACCEPTABLE TO HAVE A 0.06 DEEP x 60° CENTER MARK AT EITHER
END OF THE BAR

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 152733

DESIGN	CP	DRAWN BY	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED		APPROVED		
DATE	06.01.10	TITLE	D3197	REV. B
				SHEET 1 OF 1
				SCALE 1:1
A	03.07.01	NEW ISSUE		
B	06.01.10	CHG PIP PIN; ADD D3242-1 TAG		

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